

REMARKS

The Office Action dated July 9, 2007, has been received and carefully considered. In this response, claims 1, 4, 11, 12, 15, 16, and 21 have been amended, and claim 10 has been cancelled without prejudice. No new matter has been added. Entry of the amendments to claims 1, 4, 11, 12, 15, 16, and 21, and the cancellation of claim 10 without prejudice is respectfully requested. Reconsideration of the outstanding rejections in the present application is also respectfully requested based on the following remarks.

I. NON-STATUTORY SUBJECT MATTER REJECTION OF CLAIMS 10 & 11

On page 2 of the Office Action, claims 10 and 11 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. This rejection is hereby respectfully traversed.

The Examiner asserts that claims 10 and 11 are directed toward a signal. As mentioned above, claim 10 has been cancelled without prejudice and claim 11 has been amended to recite "processor readable medium" to address the concerns of the Examiner.

At this point it should be noted that there is no tangible embodiment requirement on patentable subject matter as long as

the claimed invention as a whole accomplishes a practical application. That is, it must produce a "useful, concrete and tangible result." State Street Bank & Trust Co. v. Signature Financial Group Inc., 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601-02. Furthermore, Applicants direct the Examiner to the case law set forth in In re Beauregard, 35 USPQ 2d 1383, 1384 (Fed. Cir. 1995), In re Lundgren, (B.P.A.I. Case No. 2003-2088 (September 28, 2005)), and others, which clearly provide a patentable subject matter basis for claim 11. Regardless, claim 11 does recite tangible embodiments. For example, claim 11 recites "[a]t least one processor readable medium for storing a computer program of instructions configured to be readable by at least one processor for instructing the at least one processor to execute a computer process for performing the method as recited in claim 1." This contradicts the Examiner's assertion that the claim 11 does not recite a computer program being stored and executable on any readable medium. Thus, claim 11 clearly recites such a tangible embodiment.

Furthermore, Applicants reserve the right to reinstate claim 10 depending upon any further appellate decisions reached in In re Petrus A.C.M. Nuijten (U.S. CAFC Appeal No. 06-1371) or related cases which addresses the patentability of signals.

In view of the foregoing, it is respectfully requested that the aforementioned non-statutory subject matter rejection of claims 10 and 11 be withdrawn.

II. THE ANTICIPATION REJECTION OF CLAIMS 1-5, 9, 12-16, 20 & 21

On pages 3-4 of the Office Action, claims 1-5, 9, 12-16, 20, and 21 were rejected under 35 U.S.C. § 102(a) as being anticipated by Peng et al. ("Detecting Distributed Denial of Service Attacks Using Source IP Address Monitoring"). This rejection is hereby respectfully traversed.

Under 35 U.S.C. § 102, the Patent Office bears the burden of presenting at least a prima facie case of anticipation. In re Sun, 31 USPQ2d 1451, 1453 (Fed. Cir. 1993) (unpublished). Anticipation requires that a prior art reference disclose, either expressly or under the principles of inherency, each and every element of the claimed invention. Id. "In addition, the prior art reference must be enabling." Akzo N.V. v. U.S. International Trade Commission, 808 F.2d 1471, 1479, 1 USPQ2d 1241, 1245 (Fed. Cir. 1986), cert. denied, 482 U.S. 909 (1987). That is, the prior art reference must sufficiently describe the claimed invention so as to have placed the public in possession of it. In re Donohue, 766 F.2d 531, 533, 226 USPQ 619, 621 (Fed. Cir. 1985). Such possession is effected only if one of ordinary

skill in the art could have combined the disclosure in the prior art reference with his/her own knowledge to make the claimed invention. Id..

Regarding claims 1, 12, and 21, the Examiner asserts that Peng et al. discloses the claimed invention. Applicant respectfully disagrees. However, in order to forward the present application toward allowance, Applicant has amended claim 1, 12, and 21 to more specifically define the claimed invention, and specifically those features that differentiate the claimed invention from Peng et al., as well as the other cited references. In particular, Applicant respectfully submits that Peng et al. and the other cited references, taken either alone or in combination, fail to disclose, or even suggest, routing a packet if at least part of a source address matches at least one source address recorded within a predetermined time period prior to arrival of the packet, as presently claimed. In contrast, Peng et al. discloses adding legitimate IP addresses to an IP Address Database (IAD), recording IP addresses that appear in a current time interval in a hash table along with a number of IP packets and a time stamp of the most recent IP packet for each IP address, and comparing the IAD to the hash table to determine the number of new IP addresses that have appeared in the current time interval. For unsophisticated

attacks, Peng et al. also discloses detecting an attack (and preventing packet routing) if the number of IP packets per IP address is larger than a certain threshold. For more sophisticated attacks, Peng et al. further discloses detecting an attack (and preventing packet routing) if the number of new IP addresses that have appeared in the current time interval changes abruptly. (See Peng et al., page 4, Section A and Fig. 3) It is clear that neither of these detection (and routing prevention) schemes disclosed by Peng et al. is based upon IP address recording time, but rather based upon IP packet/address numbers. Thus, nowhere in these disclosures by Peng et al. does Peng et al. disclose, or even suggest, routing a packet if at least part of a source address matches at least one source address recorded within a predetermined time period prior to arrival of the packet, as presently claimed. Accordingly, is it respectfully submitted that claims 1, 12, and 21 are allowable over Peng et al.

At this point, Applicant would like to remind the Examiner that, as stated in MPEP § 2131, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Regarding claims 2-5, 9, 13-16, and 20, these claims are dependent upon independent claims 1 and 12. Thus, since independent claims 1 and 12 should be allowable as discussed above, claims 2-5, 9, 13-16, and 20 should also be allowable at least by virtue of their dependency on independent claims 1 and 12. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned anticipation rejection of claims 1-5, 9, 12-16, 20, and 21 be withdrawn.

III. THE OBVIOUSNESS REJECTION OF CLAIMS 6 AND 17

On page 5 of the Office Action, claims 6 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Peng et al. ("Detecting Distributed Denial of Service Attacks Using Source IP Address Monitoring"). This rejection is hereby respectfully traversed.

As stated in MPEP § 2143.03, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). That is, "[a]ll words in a claim must be considered in judging the patentability of that

claim against the prior art." In re Wilson, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Regarding claims 6 and 17, these claims are dependent upon independent claims 1 and 12. Thus, since independent claims 1 and 12 should be allowable as discussed above, claims 6 and 17 should also be allowable at least by virtue of their dependency on independent claims 1 and 12. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 6 and 17 be withdrawn.

IV. THE OBVIOUSNESS REJECTION OF CLAIMS 7, 8, 18, AND 19

On pages 5-6 of the Office Action, claims 7, 8, 18, and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Peng et al. ("Detecting Distributed Denial of Service Attacks Using Source IP Address Monitoring") in view of Lingafelt et al. (U.S. Patent Application Publication No.

US2002/0147925A1). This rejection is hereby respectfully traversed.

It is respectfully submitted that the aforementioned obviousness rejection of claims 7, 8, 18, and 19 has become moot in view of the deficiencies of the primary reference (i.e., Peng et al.) as discussed above with respect to independent claims 1 and 12. That is, claims 7, 8, 18, and 19 are dependent upon independent claims 1 and 12 and thus inherently incorporate all of the limitations of independent claims 1 and 12. Also, the secondary reference (i.e., Lingafelt et al.) fails to disclose, or even suggest, the deficiencies of the primary reference as discussed above with respect to independent claims 1 and 12. Indeed, the Examiner does not even assert such. Thus, the combination of the secondary reference with the primary reference also fails to disclose, or even suggest, the deficiencies of the primary reference as discussed above with respect to independent claims 1 and 12. Accordingly, claims 7, 8, 18, and 19 should be allowable over the combination of the secondary reference with the primary reference at least by virtue of their dependency on independent claims 1 and 12. Moreover, claims 7, 8, 18, and 19 recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 7, 8, 18, and 19 be withdrawn.

V. THE OBVIOUSNESS REJECTION OF CLAIMS 10 AND 11

On pages 6-7 of the Office Action, claims 10 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Peng et al. ("Detecting Distributed Denial of Service Attacks Using Source IP Address Monitoring") in view of Langberg et al. (U.S. Patent No. 5,852,630). This rejection is hereby respectfully traversed.

As discussed above, claim 10 has been cancelled without prejudice. Regarding claim 11, it is respectfully submitted that the aforementioned obviousness rejection of claim 11 has become moot in view of the deficiencies of the primary reference (i.e., Peng et al.) as discussed above with respect to independent claim 1. That is, claim 11 is dependent upon independent claim 1 and thus inherently incorporates all of the limitations of independent claim 1. Also, the secondary reference (i.e., Langberg et al.) fails to disclose, or even suggest, the deficiencies of the primary reference as discussed above with respect to independent claim 1. Indeed, the Examiner does not even assert such. Thus, the combination of the

secondary reference with the primary reference also fails to disclose, or even suggest, the deficiencies of the primary reference as discussed above with respect to independent claim 1. Accordingly, claim 11 should be allowable over the combination of the secondary reference with the primary reference at least by virtue of its dependency on independent claim 1. Moreover, claim 11 recites additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 10 and 11 be withdrawn.

VI. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0206, and please credit any excess fees to the same deposit account.

Respectfully submitted,

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